- Scottish wild cat and feral domestic cats. The domestic cat is derived from the Middle East, but if they return to the wild in Scotland, they hybridise easily with wild cats.

The offspring of these hybridisations have a mix of parental genes and some people regard them as a threat to the genetic integrity of the native species.

4. **Triage**

Triage is a system widely used in the health service for rapidly assessing priorities as patients are admitted to hospital. Since funds available for wildlife conservation are limited, some conservationists have suggested we need a triage system in conservation, where we divide species into three categories.

- Top priority for conservation
- Medium priority: conserve if funds allow
- No need to put effort into this group.

But what criteria would we use to place species into these categories? See Ochoa-Ochoa (*Biol Cons* 144, 2710 2011) for an explicit use of triage with respect to amphibian conservation in Mexico – but with no ethical content. Should we have such a system for wildlife conservation in Scotland, and if so consider the ethical criteria we might use to divide species into the three categories.

5. Coping with invasive alien species

Examples of alien species can be disease organisms (such as chytrid fungus which affects amphibians), plants such as *Rhododendron ponticum*, Japanese knotweed, Himalayan balsam etc; or animals in the wrong place such as hedgehogs on the Outer Hebrides; or escaped farmed animals like mink, signal crayfish.

Natives, Aliens and Reintroductions: Closing Remarks

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We have had a very full and varied day, and I am not going to attempt to summarise all the talks in just a few minutes. The conference proceedings will be published in *The Glasgow Naturalist* and that will provide an opportunity for participants and the wider conservation and natural history community to reflect on the contents.

I'd like to thank all the speakers for providing such a fascinating and highly accessible set of talks on our various themes. We heard extensively about alien species: from Chris Smout, how do we define aliens, a magisterial historical perspective; then contrasting views on alien plants – from Jim Dickson (summary: many do no real harm) and Stuart Brabbs (the costs and effectiveness of eliminating invasive riverbank aliens); from Stan Whitaker, law and practice in dealing with aliens not all of which are invasive. The law in Scotland now defines native species according to their natural range, rather a problematic concept, given the dispersal abilities of so many species. On alien animals, Zara Gladman covered the rapid invasion of the North American signal crayfish but also the oddity that the white-clawed crayfish is not a native to Scotland but is in England and because it is threatened there, the two introduced Scottish populations are protected.

On re-introductions, we heard about the Scottish beaver trial but also about more local "re-introductions" where threatened fish populations have been successfully introduced to new lochs (would this count as an alien invasion under the new law?).

On natives under threat, we heard about studies and conservation schemes involving the chequered skipper butterfly, wild pollinators and farmland waders. This theme also included the great opportunity provided by the establishment of RSPB Loch Lomond, a nature reserve with huge potential for the protection of a wide range of native species. Another theme was public attitudes to wildlife: the badger cull has just begun in England, though not planned for Scotland. But Andy Riches showed that badger baiting is surprisingly common in Scotland. Probably the most depressing contribution (though entertainingly presented) was Stephen Woodward's account of the new pathogens spreading to attack our forest trees.

Finally, a personal note: I found it wonderful that we were able to hear authoritative talks from three recent Glasgow Zoology graduates: Ellen Rotheray, Roisin Campbell-Palmer and Zara Gladman, all of whom learned some of their fieldwork skills on University of Glasgow Trinidad expeditions.
Postscript:

Chris Thomas, professor of conservation biology at the University of York, and a leading researcher into the biodiversity consequences of climate change, raised many of the issues covered in our conference in a short 'Nature' World View article (Thomas, 2013). He claims that the UK has gained rather than

lost from the arrival of non-native species, and that attempts to control species like Himalayan balsam, just because they are non-native, are 'a waste of effort'(echoing the conclusions of Jim Dickson's conference talk). In his view, scarce resources should be saved for controlling invasive aliens that are clearly damaging, such as rats and goats on oceanic islands. The transworld movement of species can increase not only local biodiversity but also biodiversity overall, since non-native species may change so much in adapting to their new habitats that they become novel species. New species may also arise through hybridisations between non-natives and related natives, especially in plants. Climate change will also have effects on biodiversity, some of them positive. Thomas concludes 'There are excellent arguments for conserving the wildlife we already have, but it is less clear why our default attitude to novel biodiversity is antagonism or ambivalence.' Well worth reading.

REFERENCES

Thomas, C.D. (2013). The Anthropocene could raise biological diversity. Nature 502, 7.